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Choosing a Quality System

A Comparison of ISO 9000 and ANSI Z540

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Choosing A Quality System

- Why use a Quality System *(Excuses Against)*
  - 'We've done it this way forever…..'
    - Does not mean there isn't a better way.
    - Does not mean your doing it right
    - Just means the system has never been evaluated
  - 'We're compliant with ….'
    - How do you know?

Choosing A Quality System

- Why use a Quality System *(Excuses Against)*
  - 'We produce a good product, I've never heard any complaints
    - Have you been listening
    - Have you asked your customers

Choosing A Quality System

- Why use a Quality System *(Excuses Against)*
  - 'Don't fix it if it ain't broke'
    - How do you know it isn't broke if you don't check?
  - 'We use to have that - but it didn't work'
    - Personnel and management failed to make it work.
    - Not monitored
    - Not enforced

Choosing A Quality System

- Why use a quality system. *(Reasons For)*
  - Changing global and national economies.
    - Force changes in how companies conduct business in order stay competitive.
    - Trade barriers
    - Trickle down to even the smallest companies.
  - Customers impose quality system requirements
    - To meet their customers requirements.

Choosing A Quality System

- What is the benefit
  (Similarities between both systems)
  - Requires Documented Processes
    - Say what you do - do what you say.
  - Requires Management Commitment
    - State management commitment to quality
  - Requires Audits of the Processes
    - Verify the processes are performed according to procedure.

Choosing A Quality System

- What is the benefit
  - Requires you establish benchmarks and set goals
    - Monitor and measure your system
  - Requires Corrective Actions
    - Customer complaints
    - Audit Findings
    - Failing to meet objectives

Choosing A Quality System

- What is the benefit
  - Requires use of trained and qualified personnel.
    - Personnel have to have the knowledge and skills to perform their job.
      - Formal Schooling
      - On the Job Training
      - Continuous Triaining

Choosing A Quality System

- What is the Benefit
  - Continuos Improvement
    - Process Evaluation *(Audits, Corrective Action)*
      - Reduce costs
        - » Reduced Rework
        - » Prevent Lost business
      - Increase Productivity
        - » Better, Faster & Cheaper (Choose three)

Choosing A Quality System

- Differences between the two systems
  - ANSI
    - specifically written for calibration and testing labs
  - ISO
    - Broad scope - pertains to manufacturers as well as service providers.

Choosing A Quality System

- Differences Between the two systems
  - ANSI Requires you prove proficiency by participation in:
    - Measurement Assurance Programs
    - Proficiency Testing
    - Inter-laboratory comparisons
  - ISO relies on continuos process improvement to achieve proficiency

Choosing A Quality System

- Differences between the systems
  - ANSI results in Certification
    - The Quality Management System meets the requirements of the standard
    - Laboratory is capable of performing measurements within the scope of the competency
  - ISO results in Registration
    - The Quality Management System meets the requirement of the standard as it pertains to the scope of registration.

Choosing A Quality System

- Costs
  - ANSI Based on number of disciplines being accredited.
    - Number of auditors and technical assessors.
    - Number of proficiency tests.
    - $3000 for 1st discipline plus $800 for additional field
    - plus travel costs for auditors and assessors
    - Pre assessment and post assessments

Choosing A Quality System

- ISO can cost less
  - Based on the size of the company
    - Larger companies require more time and/or auditors

Choosing A Quality System

Example Based on a small (<10 employees)
calibration laboratory performing three measurement areas in Chicago, Il.

- ANSI Z540 Costs
  (NVLAP estimate)
  - Three (3) Disciplines
  - Four (4) member audit team traveling from various parts of the US.
  - Three (3) day audit
  - Optional
    - one (1) day pre audit
    - Follow up audits

- ISO 9000 Costs
  (Using Local Assessor)
  - Flat Rate for audit
  - Two (2) member team from local area.
  - Three(3) day audit
  - Yearly follow up audits
  - Optional
    - one (1) day pre- audit
    - Follow Up audits

Choosing A Quality System

- ANSI Z540
  - $4600 ($3000 1st discipline + $800 for each additional field)
  - $2500 (Per Diem & Travel for four auditors for three days)
  - $500 (application fee)
  - $ 3000 (billed at cost, estimate of $1000 for each discipline)
  - $ 10600 (total for 1 year does not include out years)
- ISO 9000
  - $5000 (Flat Fee, includes application fee)
  - $250 (miscellaneous travel expenses, local auditors)
  - $2000 (Two (2) Yearly Follow up audits)
  - $1800 (pre assessment)
  - $9050 (total for 3 years)

Choosing A Quality System

- Summary
  - Both systems verify the Quality Management System
  - ANSI requires you prove your capabilities
  - ISO can be less expensive.

Choosing A Quality System

- Summary
  - What system to use depends on your customers requirements.
  - Budget
  - Company goals